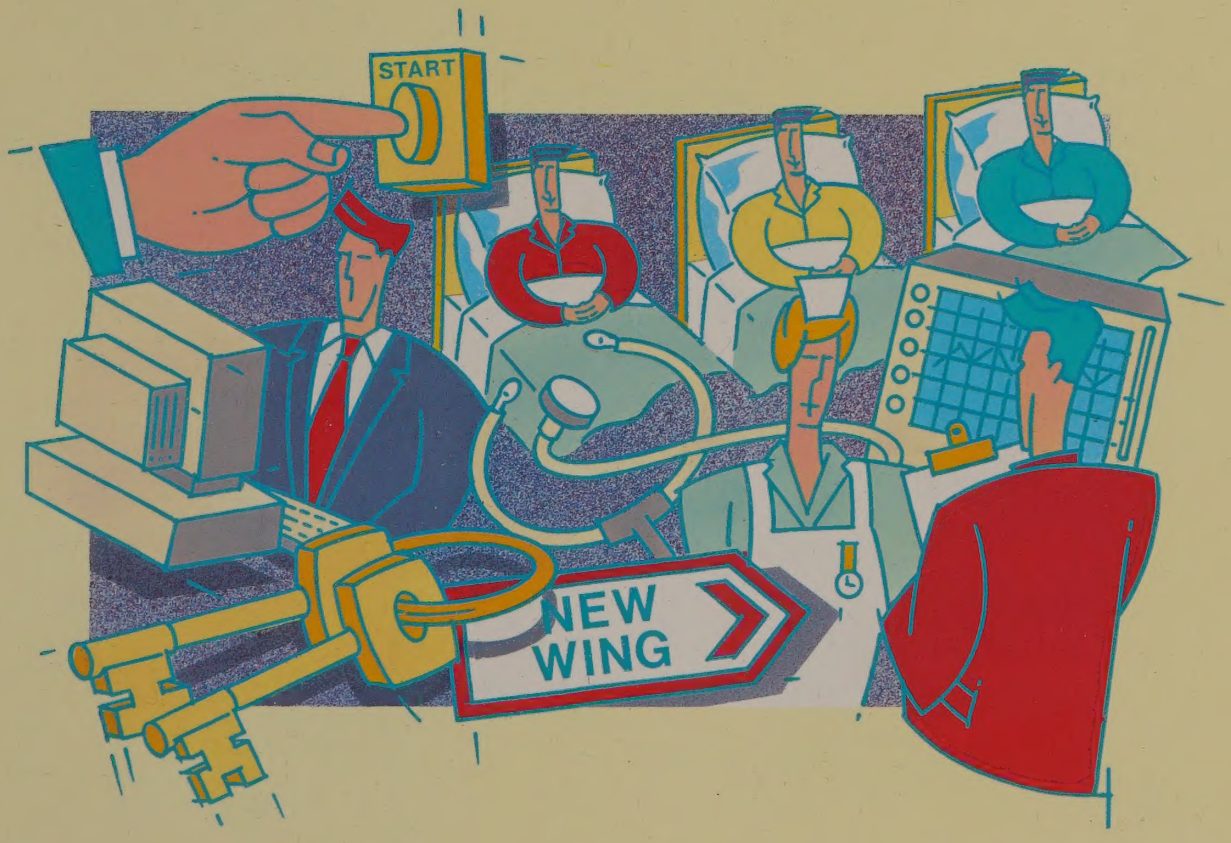
MC0345

Capital Investment Manual

Commissioning a Health Care Facility



NHS
Executive

This booklet is part of the *Capital Investment Manual*. It outlines the general principles and good practice that should be followed when commissioning a heath care facility and bringing it into operational use.

The *Capital Investment Manual* comprises the following booklets:

Overview

Project Organisation

Private Finance Guide

Business Case Guide

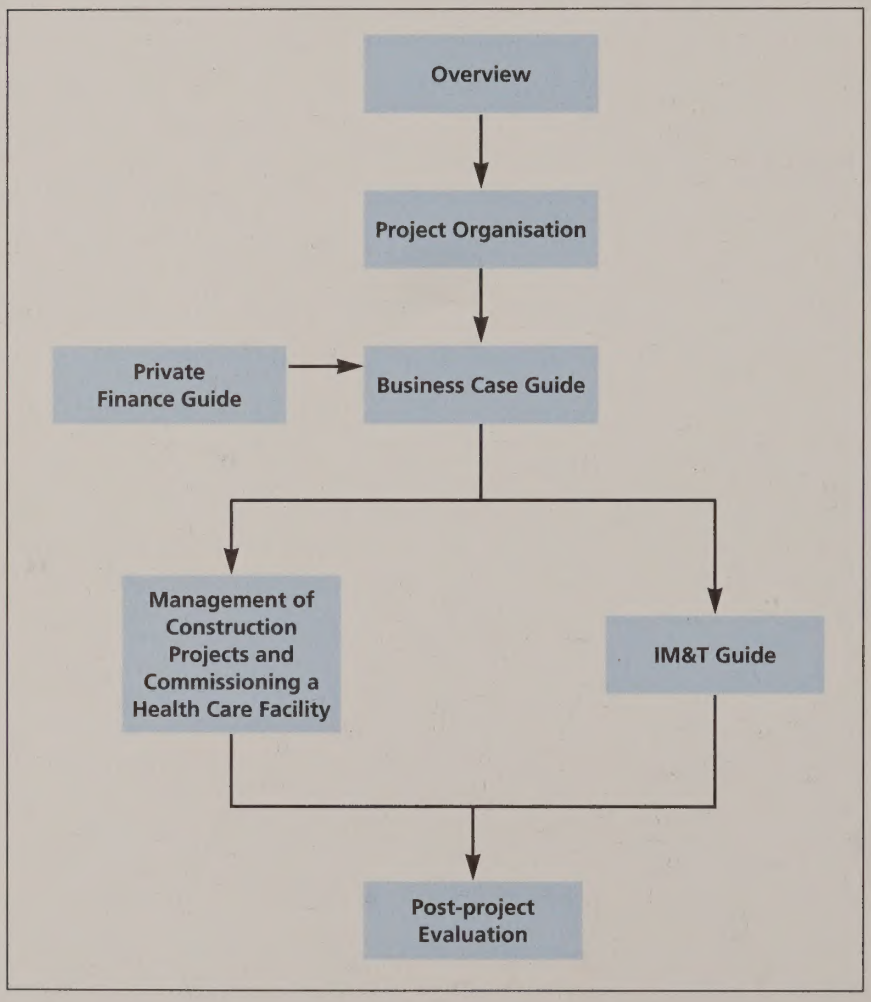
Management of Construction Projects

Commissioning a Health Care Facility

IM&T Guidance

Post-project Evaluation

Copies are available at all HMSO Bookshops.



© Crown copyright 1994
Applications for reproduction should be made to HMSO
First published 1994

ISBN 0 11 321724 2

LONDON : HMSO

Contents

Introduction	3
Organising the Commissioning Process	4
Planning for Commissioning	7
The Commissioning Programme	8
Index	18

Introduction

Upon completion of construction (see *Management of Construction Projects* booklet), the facility must be brought into use. It is all too easy to underestimate the importance of the commissioning process. With attention focused on the construction project and the delivery of the new health care facility, senior managers may neglect or fail to appreciate the importance and complexity of the task involved in commissioning. At worst, this failure may result in the loss of many of the benefits predicted in the original business case.

It is not sufficient to leave it to individual departmental managers to undertake their own commissioning activity. This could result in confusion, waste and the perpetuation of inefficient practices or the continuing use of outdated equipment. Senior managers, users and departmental managers should be fully involved in the process.

This booklet describes how the commissioning process should be organised and the tasks to be addressed, giving extensive supporting advice. The successful realisation of the commissioning process, which should be treated as a project in its own right within the overall scheme, should ensure a smooth transition to the new working arrangements and realisation of the anticipated benefits.

The process of commissioning a new facility is as important as those which have gone before it and must be subject to the same commitment, involvement and control by the Trust Board and the senior management.

The commissioning of a health care facility embraces two distinct tasks:

- the technical commissioning of the facility. This is dealt with in detail in Stage 5 of *Management of Construction Projects*;
- the operational commissioning of the facility by the Trust, which is the subject of this booklet.

The following principles should be observed to ensure the success of the commissioning process:

- An effective commissioning organisation must be established, involving the key appointment of a Commissioning Manager, supported by an adequately resourced commissioning team.
- At the earliest possible opportunity, all the tasks which need to be addressed as part of the commissioning process must be identified and included in a commissioning masterplan.
- Departmental managers and users of the new facility must be involved at all stages of the commissioning process.

The initial plans for bringing the new facility into use should be prepared during stage 4 of the construction project. The first task should be the appointment of the commissioning manager.

Organising the Commissioning Process

1.1.1 The organisation of the commissioning process should flow from the structure put in place for the management of the construction project, for which an investment decision maker, project owner and project director will have been identified – see *Project Organisation* booklet. For very large schemes, the Trust may have created the additional role of 'project development manager', with the project director having sole responsibility for the delivery of the construction project.

Appointment of the Commissioning Manager

1.2.1 As the scheme moves into the commissioning phase, the individual appointed as the commissioning manager may be:

- the existing programme development manager;
- the existing project director;
- a new commissioning manager working to the programme development manager (with the project director remaining responsible for the construction project); and
- a new commissioning manager appointed by and working to the project director.

1.2.2 This booklet has been written on the basis that the commissioning manager will work to the project director. Trusts should adjust the roles and responsibilities described if an alternative organisational structure is in place.

1.2.3 The commissioning manager will be a senior manager within the Trust. In practice, the commissioning manager may be an existing employee of the Trust, but consideration may be given to recruiting a new member of staff or using an external secondment, for the term of the commissioning process.

1.2.4 Given the complexity and scale of the commissioning process, which will usually involve organisational change, it is essential that adequate administrative and secretarial support is given to the commissioning manager at an appropriate level.

Duties of the Commissioning Manager

1.3.1 The duties of the commissioning manager should encompass:

- chairing and managing the business of the commissioning team and overseeing any supporting working groups set up to undertake detailed work, co-ordinating input where appropriate, particularly in relation to cross-group issues;
- establishing a programme for bringing the facility into use – the commissioning masterplan – and agreeing this with senior management;
- liaising with and securing the involvement and support of the operational managers of the services affected by the commissioning process;
- liaising closely with the project manager on the progress of the construction project, especially in relation to schemes to be commissioned in phases;
- establishing, with operational management, detailed working procedures for functions within the health care facility;
- establishing, with operational management, staffing levels within the facility and matching these with the assumptions made in the Full Business Case. This process should include a strategy for the transfer of existing staff or the recruitment of new staff, and for identifying training requirements;
- establishing, with operational management, revenue budgets for functions in the facility and matching these with the assumptions in the Full Business Case;
- establishing a strategy, with operational management, for changing staffing and revenue budgets as required;
- ensuring that the strategy for equipment procurement, defined at the Full Business Case stage, and for equipment procurement and storage, as part of the scheme, is in place;
- ensuring that a strategy for equipment installation is in place;
- liaising with the project manager for the delivery and storage of equipment which will need to be put in place by the contractor as part of the construction project (Group 2 equipment);
- reporting variances from the Full Business Case assumptions to the project director;
- providing regular reports on progress in carrying out the commissioning masterplan, and on staffing and revenue projections, to the project director and the project owner/Trust Board;
- highlighting matters of policy which should be brought to the attention of the project director;
- identifying and, where possible, resolving conflicts which arise in the commissioning programme;
- providing a focus within the Trust for matters relating to the commissioning process;

- providing a focus for all external interest in the commissioning process;
- ensuring that progress on commissioning the facility is notified to patients and the public;
- liaising with any relevant external organisations, such as voluntary bodies, the local Community Health Council and charities;
- organising the transfer of services into the health care facility;
- handing the facility over to operational management;
- organising the official opening; and
- collecting information relevant to the future evaluation of the project.

1.3.2 The commissioning manager's direct line of responsibility to the project director and thereafter to the project owner continues the theme of personal direct responsibility for the outcome of the project and ensures firm control of the processes inherent in commissioning.

Appointment of the Commissioning Team

1.4.1 The commissioning team should operate under the direction of the commissioning manager, who should chair formal meetings and report to senior management.

1.4.2 The membership of the commissioning team should be drawn from the users of the health care facility, on a representative basis. It should include members of medical, nursing, operational management, finance, personnel, equipping, estates and other staff, as deemed appropriate for the scheme.

The project director and project manager should be members of the team to ensure consistency between implementation of the construction project and commissioning.

ROLE OF THE COMMISSIONING TEAM

1.5.1 The role of the commissioning team will be to support the commissioning manager in bringing the building into use, taking special care to ensure that the business objectives of the scheme are delivered.

The resources required for commissioning must be specified in the full business case, as the overall project cost must include commissioning costs.

WORKING GROUPS

1.6.1 For projects which involve a number of different user groups of the health care facility, the commissioning team should establish smaller working groups with a remit to deal with the details of the commissioning process which entails:

- drafting operational procedures;
- establishing baseline and future staffing profiles;
- establishing baseline and future revenue budgets;
- establishing equipping requirements;
- identifying policy issues for referral to the Commissioning Team or the Construction Project Team;
- identifying staff training needs; and
- establishing the details of the occupation programme for that user function, for incorporation into the overall Commissioning Masterplan.

1.6.2 The working groups should make regular reports to the commissioning team on progress in meeting critical commissioning masterplan deadlines. In practice, each of the working groups should be chaired and serviced by the commissioning manager or one of his or her staff.

1.6.3 Membership of working groups should be kept to a minimum, utilising key staff from the area dealt with by the group. Membership should be flexible, however, as it may be necessary to co-opt others as required.

1.6.4 It is important to stress that each member of the working group has a responsibility to liaise closely with colleagues in the user department or support function. Group members should ensure that all relevant information is available and that progress on commissioning and related issues is disseminated widely.

1.6.5 For example, the working group might identify a requirement to modify the time of delivery of pharmacy supplies to a department, because of a change in opening hours or working practices in that department. It would be sensible to involve the chief pharmacist or member of staff responsible for delivery systems in discussions relating to this, as it may have repercussions on other aspects of their service.

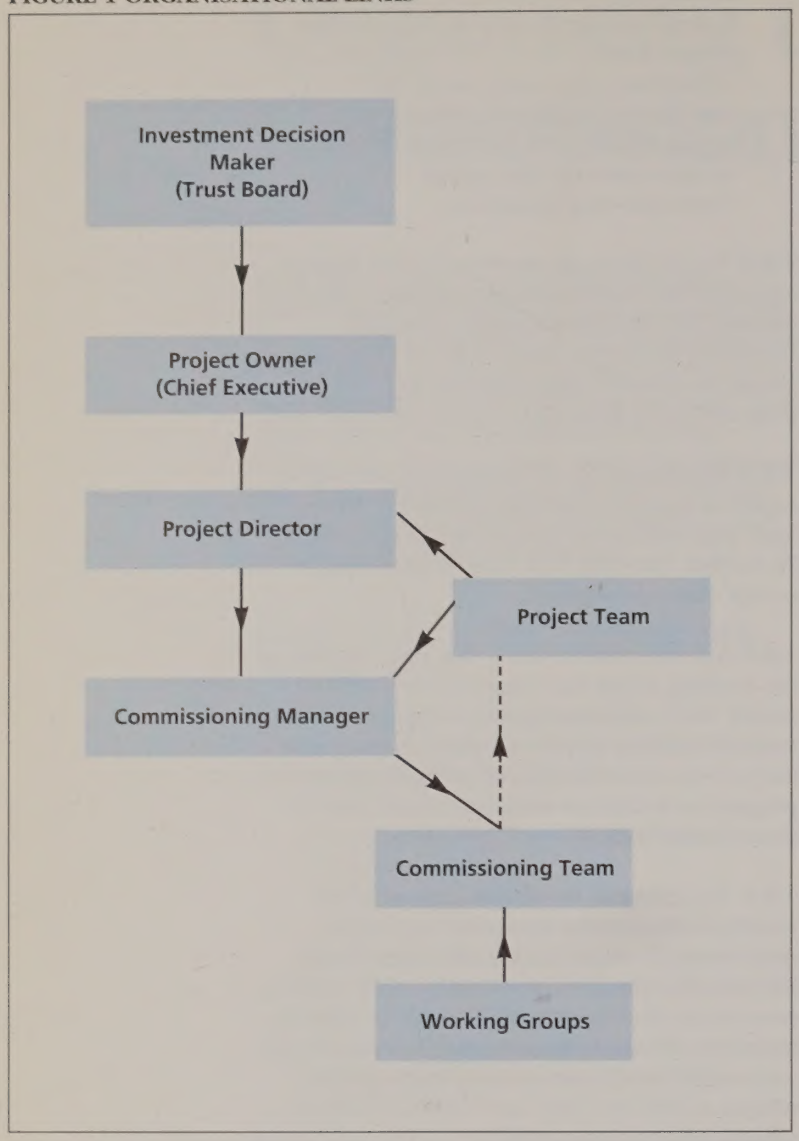
1.6.6 Plans drawn up by the working groups should be formally accepted in writing by the functional senior manager, to ensure that understanding and ownership are fostered.

1.6.7 All documentation should be dated and supported by action notes arising from each meeting of the working group.

Organisational Links

1.7.1 There must be clear lines of accountability and reporting between all individual groups established as part of the commissioning process. Working groups should be set up under the aegis of the commissioning team, which in turn will report to the commissioning manager.

FIGURE 1 ORGANISATIONAL LINKS



Links with the Construction Project Team

1.8.1 Links should be established between members of the commissioning team and the project team on progress in implementing the commissioning masterplan and the work of the working groups. Regular updates on the equipping process and its costs should also be made.

1.8.2 Reports should be made by the commissioning manager to the project director, who will report to the project owner and the investment decision maker, as appropriate, indicating:

- progress on commissioning the scheme against the project implementation plan in the Full Business Case;
- cost reports showing any variances to the planned expenditure profile; and
- progress against the commissioning masterplan.

1.8.3 Regular reports on this process should ensure that the top management of the organisation continues to recognise its ownership of the overall process and is aware of emerging difficulties or changes to the agreed programme of implementation.

1.8.4 It is equally important that regular update meetings are held between the commissioning manager and the project director to deal quickly and effectively with any issues that may arise or decisions which have to be made on a day-to-day basis.

Links with the Contractor

1.9.1 All links with the contractor should be made through the project director to the project manager. It is useful, though, for the commissioning manager or one of his or her staff to be present at site meetings to ensure that any potential problems can be identified easily. In many cases, problems can be avoided in this way.

1.9.2 Similarly, it can help build a good working relationship with the contractor, which can be useful in the coordinating of post contract works with the commissioning masterplan.

Planning for Commissioning

The Commissioning Masterplan

2.1.1 The commissioning manager, drawing on the advice of the commissioning team and the working groups, and acting within the objectives of the scheme and the project execution plan contained in the full business case, will draw up a commissioning masterplan to:

- identify key dates for occupying or bringing the facility into use. Where many functions are concerned, this may have to be undertaken on a phased basis over time;
- identify key tasks in the occupation and transfer process and identify clearly where the responsibility for these lies;
- identify a critical path for an integrated transfer of functions addressing clinical need and functional interdependencies;
- identify key dates for selecting and ordering equipment;
- identify any closures and arrangements for security and disposal of sites if relevant;
- ensure that there is little or no disruption to patient services; and
- identify a staff recruitment, transfer and counselling programme.

2.1.2 The commissioning masterplan can be translated onto a simple bar or Gantt chart using freely available project management software. Such a pictorial representation can often be useful for staff and for monitoring progress at a glance.

Effects of Different Procurement Methods

2.2.1 The selection of the contract procurement strategy will have an effect on the commissioning process. More detail on different procurement methods is given in *Management of Construction Projects.*

2.2.2 Most procurement strategies will not greatly affect the work of the commissioning team. One strategy which will, however, is 'design and build'.

2.2.3 An outline brief and performance specification for the scheme will have been given to the contractor for his or her design team to develop into a full design. While the detailed brief is being discussed and agreed with the users, building works will have begun.

2.2.4 It is recommended that the commissioning manager and commissioning team are established at the time of letting of the contract, in the normal way. This should allow the staff involved in the commissioning of the facility to be aware at first hand of the design decisions and the overall thinking behind the development.

2.2.5 Normally, the commissioning team will need to interpret the agreed brief, which may have been developed some time before. By ensuring that the commissioning staff are aware of the design process, a smooth handover from briefing to commissioning can be effected.

2.2.6 This is particularly important in the short timescales of design and build projects. It is not recommended that commissioning staff be appointed after the design has been agreed as this may leave insufficient time for commissioning duties to be undertaken in full.

Enabling Schemes

2.3.1 The project may require a number of enabling schemes either prior to the start of the development, or during the contract period. The commissioning manager, with the support of the commissioning team, will need to organise, with the project team, the development of plans for implementation. These plans should form part of the overall project plan and be reflected in the commissioning masterplan.

Risk Assessment

2.4.1 A key part of the masterplan should be to include a risk assessment of:

- late delivery of the health care facility;
- problems in bringing the building into use which may delay full operational commissioning; and
- a longer commissioning period than originally envisaged in the Full Business Case, due to pressing operational needs.

2.4.2 This is essentially an updating of part of the risk management strategy in the Full Business Case. The management plan must be updated in the light of progress on the scheme and issues which may have come to light as the commissioning masterplan is being compiled.

2.4.3 Any of these factors could delay exploitation of the benefits of the development detailed in the Full Business Case. A full risk assessment of these factors must be undertaken and a strategy for risk management put in place, in the same way as a strategy for the contract itself was defined for the Full Business Case. This must be drawn up at the outset of commissioning and updated regularly.

The Commissioning Programme

Operational Procedures

3.1.1 Operational procedures and principles should be drawn from the operational policies for a particular function, which were developed as part of the project brief and informed the design of the facility.

3.1.2 It is important to distinguish between operational policies which formed part of the design brief and operational procedures. Operational policies are usually quite basic statements of intent about how a facility should operate and the interrelationships between different patient and staff areas. The policies inform the design process. These must be agreed and officially adopted before the commissioning procedures are compiled. Unless agreement has not been reached on common issues, finance, staffing and relationships with other departments will be unclear, and it will be impossible to formulate consistent, compatible procedures.

3.1.3 Operational procedures (or systems) are drawn up during the commissioning process and address the minutest detail of the operation and staffing of a health care facility. The procedures should contain the following information:

- how staff are to be deployed;
- the numbers of staff required in each functional area of the facility;
- managerial responsibilities;
- how patients will be received;
- management of patient flows; and
- how other departments impinge on the operation of the facility.

3.1.4 The procedures should provide full details of how a particular facility or element of that facility will function.

3.1.5 A very important feature will be the relationship between this element and other functions within the new facility or with the rest of the Trust. Each particular facility or element should also relate to the overall policies of the Trust.

3.1.6 These policies and procedures should provide the mechanism for staff training and orientation of the health care facility and should be carefully documented and disseminated before the transfer of the function to the new facility.

3.1.7 The operational procedures, in restating the principles behind the design of the facility, should form a strong base for the evaluation of the facility once it has been brought into use. They should be specified during the early stages of commissioning and should be constantly refined and honed during the overall commissioning period.

3.1.8 A general format for each procedure document should be defined at the outset of commissioning, in order to provide a consistent approach when they are being considered by each of the working groups. Subjects for inclusion are:

- services to be provided by that department;
- hours of operation, opening hours, or visiting hours;
- predicted workload – this should be taken from the projections in the Full Business Case at the outset, but should be modified by contracting targets;
- quality standards, including Patients' Charter targets and how these will be achieved;
- how each room or activity space in the department will be utilised;
- arrangements for training of staff in the use of specialised pieces of equipment – it may be necessary to refer to the relevant technical manual for this equipment, which will be provided by its supplier;
- patients who may be referred outside that department and arrangements for how they will be directed there or taken there if necessary;
- arrangements for delivery and collection of supplies, post, patient notes, etc.
- numbers and grades of staff;
- staff shift arrangements;
- management arrangements for each staff group;
- details of projected income and expenditure for the department;
- details of interrelationships with other departments and the effects on their staffing levels and budgets – this will require good co-ordination with the operational procedures for these departments;
- how information is collected for patient records, clinical audit and financial systems;
- requirements relating to COSHH and health and safety legislation; and
- requirements relating to local Trust policies.

3.1.9 A significant amount of detail needs to be included, but it may be helpful to have a summary sheet for quick reference. A sample procedure using the proposed format should be issued as a guide for working groups.

Staffing

3.2.1 At the outset of commissioning, the staffing

levels made explicit in the Full Business Case should be reviewed as part of the preparation of the operational procedures.

3.2.2 Any changes in staffing levels since Full Business Case approval should have been carefully monitored against the business objectives of the Trust. In order to gauge the effect on the financial assumptions made in the Full Business Case, a current statement of staffing levels should be made. The commissioning manager should consider this with the operational managers and the working groups to decide what action should be taken to ensure that the Full Business Case objectives can be achieved. Significant variances must be referred to the project director.

3.2.3 The review of staffing levels provides an opportunity for re-examination of working practices and the consequent levels of staffing, in the light of changing clinical practice and the delivery of support functions. The commissioning manager should involve the Trust's personnel department fully in the production of staffing schedules. It is recommended that a personnel manager is co-opted onto a working group when staffing levels are initially discussed.

3.2.4 The following points need to be considered:

- What are current staffing levels?
- What will staffing levels be in the new facility, using existing working practices?
- Is there an opportunity for staffing reprofiling to meet emerging new working practices?
- Given the adoption of new working practices and reprofiling, what will be the effect on the current staff complement?

3.2.5 Once these issues have been addressed, a preferred staffing schedule can be produced and costed against projections made in the Full Business Case.

3.2.6 There is little current guidance available on staffing norms for hospital departments, and most is no longer fully applicable as individual health care providers adopt local working arrangements. Best practice may be sought from other providers who offer a similar service and a judgement made based on their experience and workload.

3.2.7 On completion of this analysis decisions can be reached by the following:

- numbers of existing staff to be transferred to the new facility;
- numbers of staff to be transferred from other facilities, perhaps even from outside the Trust – adequate planning for transfer arrangements must be made and relocation costs taken into account;
- costs associated with retraining;
- individual counselling sessions on the proposed changes or transfers;
- redundancy costs; and
- recruitment requirements and the programme for recruitment.

3.2.8 During this planning exercise, consideration should be given to how services are to be transferred into the new facility and what the timescale should be. In many circumstances, a phased occupation of the new facility, perhaps over several weeks or months, will be necessary to ensure that there is no disruption to the services offered to patients.

3.2.9 In these circumstances, arrangements should be made for the short-term employment of staff, to ensure adequate staffing levels in the new facility as it is being brought into use and also in the old facility while the services there are being run down. These are usually known as 'double running costs'.

3.2.10 The commissioning team should ensure that these double running costs are minimised. They should be assessed early on in the commissioning process and fed into the process of setting revenue budgets between the commencement of commissioning and full occupation.

3.2.11 After these assessments have been made, a strategy for recruitment of staff will need to be drawn up. Most health care providers should be aware of the local circumstances affecting recruitment in certain areas of expertise and able to plan accordingly.

3.2.12 Each working group will need to define key dates by which new staff are to be in place and the recruitment strategy needed to comply with this. This activity should form a key part of the commissioning masterplan.

Keeping Staff Informed

3.3.1 An important issue for consideration, not just by the commissioning team, but by the top management of a health care provider should be the effects on staff working at sites which may be earmarked for transfer or closure under the development programme.

3.3.2 Staff who are closely involved with the scheme are likely to be committed to it and keen for it to be in operation. Staff who may be transferring from a facility in which they have worked for years will not necessarily have the same enthusiasm, and this should be taken into account.

3.3.3 It is important to:

- keep staff in touch with project developments on a regular basis. This should assist in promoting general ownership of the

scheme and allow staff to prepare for the new working arrangements;
- ensure that information is readily available about progress on the scheme and progress on commissioning – get staff used to what the key dates are.

3.3.4 This may require operational managers, the commissioning manager and/or the project director to meet staff groups on a regular basis, in small groups or at formal presentations. It is recommended that the project owner makes an appearance from time to time, to underline the importance of staff communication.

3.3.5 Suggestions for ways of updating staff include:

- a regular newsletter following the progress of the scheme; and
- an exhibition showing scheme progress and photographs of the work underway.

3.3.6 The latter device is particularly useful in the months prior to the opening of the scheme. If a number of different sites are involved, the exhibition should be moved from site to site.

3.3.7 The importance of setting key dates well in advance and maintaining them is essential to allow staff to prepare themselves.

3.3.8 Morale should be carefully monitored in these circumstances and counselling should be available for staff in order to build and foster confidence in the new organisation.

3.3.9 A full programme of visits to the new facility should be offered, and to the new provider site if appropriate in order to give new staff, or staff who are transferring, sound knowledge of their new surroundings.

Revenue Budgets

3.4.1 Revenue budget baselines must be produced at the outset of commissioning and monitored closely to ensure achievability of the Full Business Case objectives. These baselines should then be considered in the light of the emerging staffing profiles and schedules arising from the production of the operational procedures.

3.4.2 It is crucial that the operational managers of the service(s) involved are part of this process: they are the managers of the budgets and should have full ownership of, and participation in, discussions relating to these budgets, which should form part of the overall Trust business planning process.

3.4.3 Variances from the Full Business Case assumptions must be carefully monitored and explicitly identified in the overall strategy of the project implementation.

3.4.4 All income and expenditure projections must take account of the effect of any 'double running costs' so that the transition between old and new facilities can be fully budgeted for.

3.4.5 In order to provide detailed advice to the commissioning team, it is recommended that one of the key members is a representative of the finance function. This person should be present at all meetings or adequately and appropriately represented, and should take responsibility for the co-ordination of all financial issues.

3.4.6 Depending upon the size of the scheme, it may be appropriate to establish a separate finance working group to co-ordinate and monitor the financial state of the scheme.

The Business Case

3.5.1 The Full Business Case, the approval of which will have triggered the project implementation, should be reviewed during the overall commissioning process. This process of reconfirming the business objectives of the Trust should form an integral part of the wider processes of service contracting and business planning.

3.5.2 It will be the responsibility of the project owner to ensure that it is undertaken and the project director, through the commissioning manager and the commissioning team, will be responsible for monitoring and delivering these objectives.

3.5.3 During the implementation of larger schemes, it is likely that changes in purchaser intentions or Trust policies may trigger changes to the functional content of the scheme. The effects of such changes should be fully and rigorously explored and quantified by the working groups, reporting through the commissioning team to senior management.

Integrated Processes

3.6.1 It is vital that the commissioning process is not perceived as being separate from the normal business of the Trust. The Full Business Case will have stated that the implementation of the project is crucial to improving the services offered by the Trust. In some instances, the viability of a Trust can be comprised as much by the assumptions made in the Full Business Case regarding contracted income and the associated costs as it can by capital cost overruns.

3.6.2 It will be the responsibility of the project director to ensure that the work on commissioning, in defining staffing levels, and expenditure levels is integrated with the processes of service contracting and business planning.

3.6.3 The project director, through and with the commissioning manager, must work closely with operational management to ensure that:

- the contracted activity levels match those projected in the full business case – this should entail close co-operation with the

Service Contracting personnel of the Trust;
- Full Business Case expenditure targets are monitored through the process of business planning;
- the business plans of operational functions should accord with Full Business Case objectives;
- variances to Full Business Case assumptions should be referred to the project owner. The Trust Board will need to be made aware of very significant changes, as these may have an effect on future Trust strategy.

Transfer of Facilities

3.7.1 The key transfer dates of services into the new facility should be widely publicised inside the Trust and outside. Purchasers and GPs will need to be aware of these key dates for planning purposes, as will Trust operational managers.

3.7.2 Key milestones, such as completion of the commissioning process and first patient day, should be widely publicised. Local people should be encouraged to visit the facility on open days.

3.7.3 Patient representative groups should have been consulted about the design of the facility to ensure that it meets their needs. These groups should be kept up to date with the details of the commissioning masterplan and should be encouraged to visit the facility during the commissioning period.

3.7.4 The transfer programme needs to be carefully co-ordinated as regards the transfer of equipment and the delivery of new equipment. If a large percentage of fixed equipment is to be transferred, a considerable amount of support will be required to dismantle and refit items in the new facility.

Purchasers

3.8.1 At Full Business Case stage, major purchasers will have given their explicit support for the scheme.

3.8.2 Purchasers, including GP fundholders, are key stakeholders in the successful outcome of the scheme, and should be kept fully informed on progress during the implementation of the scheme and with the commissioning masterplan.

3.8.3 Tours of the new facility should be provided for key members of staff in purchasing authorities and for interested GPs, along with presentations reporting the progress of the scheme.

Phased or Staged Occupation

3.9.1 Many schemes will require occupation of the new facility to be undertaken on a phased basis, and this must be reflected in the commissioning masterplan. This will require close liaison between the commissioning team and the project manager for the construction project.

3.9.2 A number of different buildings may be handed over, under the contract, on a number of different dates. Arrangements must be in place to bring these facilities into use, as they become available, unless there are good operational or clinical reasons why this cannot be done.

3.9.3 A single facility may also be handed over to the provider in sections, in which case careful thought must be given to:

- access within the building to each of the sections as they are handed over;
- areas through which users may have to pass that might still be under the control of the contractor – carefully agreed procedures for this must be worked out with the contractor via the project manager;
- security provision for these areas, as they are the responsibility of the provider once they have been handed over.

3.9.4 Operational procedures should take full account of these arrangements and ensure that the relevant staffing, budgets and delivery arrangements are in place to cope with this eventuality.

Decanting

3.10.1 'Decanting' is the term used to describe the temporary relocation of facilities, for example to permit refurbishment or closure of an old facility before the final accommodation is ready for use. This will have implications for a number of support services on an interim basis.

3.10.2 Again, full account of this must be taken in the operational procedures and the commissioning masterplan.

Strategy for Equipping

3.11.1 The production of a strategy for equipping the facility forms part of the Full Business Case submission.

3.11.2 The commissioning team and its working groups should establish a procedure to reinforce the Full Business Case strategy and ensure that:

- transfer items within a department are clearly identified;
- a procurement strategy is arranged for replacing those items due for replacement before occupation of the new facility;
- a procurement strategy is agreed for purchasing new items.

3.11.3 This overall strategy for equipping the new facility should have been agreed by the project director and the project team as part of the construction project.

Equipping

3.12.1 The equipment budget will have been set as part of the Full Business Case submission.

3.12.2 The initial listing, which provides the design team with a basis for developing the detailed design of each room, will have been shown on the room data sheets and agreed during the briefing period of the construction project.

3.12.3 The commissioning team should re-examine the room data sheets, extract and develop equipment schedules, and identify the following:

- items currently in use that are expected to be transferred to the new facility;
- items currently in use that are expected to be transferred, but also to be replaced during the lifetime of the project;
- items to be bought as new from the equipping budget.

3.12.4 There are four types of equipment:

- Group 1: these items are mainly fixed pieces of equipment; they will be supplied and put in place by the contractor.

- Group 2: these are items of fixed equipment purchased by the health care provider and put in place by the contractor as part of the contract – examples are x-ray viewers, soap dispensers etc.

- Group 3: these are moveable pieces of furniture and equipment purchased by the provider and put in place once the facility has been handed over – examples are desks, chairs, mobile pieces of medical and scientific equipment such as mobile x-ray machines and beds.

- Group 4: these items are portable pieces of equipment having no overall critical space implication, such as waste paper bins, telephone handsets, etc – they are usually not specified on the original room data sheets.

3.12.5 The equipment groups shown on the room data sheets may need to be altered if the majority of equipment is to be transferred. Some Group 2 items may need to be identified as Group 3 if they are to be transferred and fitted at the same time as the department they belong to is transferred. The cost of this exercise should be clarified at an early stage and funds identified.

3.12.6 It is likely that amendments will be required to the list of items to be replaced before occupation and those to be bought as new. The former category should be addressed as part of the normal business planning process of that service and these changes recorded by the commissioning team. Items in the latter category will require the approval of the project director to be added to the list of newly procured equipment. The overall equipping budget should not be exceeded.

3.12.7 Group 4 items are often not dealt with adequately as they do not appear on room data sheets because they have no space implication and no interest for the design team during the briefing process. However, it should be possible for the project team, on the advice of an experienced capital equipping manager, to make a good assessment of the requirements for Group 4 items and ensure that a sufficient sum has been allowed for their purchase as part of the Full Business Case. The capital equipping manager should normally be a member of the Trust's supplies procurement division, who will have responsibility for the procurement of capital equipment. The capital equipping manager will normally be responsible to the head of the procurement function, but should report to the project director for the purposes of equipping the new facility. For example, it will be known how many telephone points there are in the new facility and how many there are in the existing one, the shortfall in handsets should then be easy to calculate and an allowance made.

3.12.8 Group 1 equipment is specified before the beginning of the commissioning process and can be the easiest and also the most difficult to specify. In a relatively straightforward development, most of the Group 1 equipment will be benching and fairly low-tech equipment easy to specify. In a complex development, such as a radiology department, the specification of Group 1 equipment will be less straightforward, as the technology associated with such a function changes quickly, and is almost certain to change between the submission of the Full Business Case and the point at which the equipment must be ordered by the contractor.

3.12.9 In these cases it is often sensible for the capital equipment manager and the department concerned to open dialogues with a number of suppliers over the lifetime of the project to gauge the market situation. The final design of the room into which the equipment is to be fixed should be left flexible to ensure that it can meet the needs of the equipment when it is finally specified.

3.12.10 A provisional sum, based on dialogue with suppliers, can be included in the building contract, and firmed up closer to the time of ordering. The ordering of such pieces of equipment will usually be subject to EC rules on competitive tendering, and the commissioning manager, as part of the commissioning masterplan, should make allowances for the time taken to undertake this process.

SELECTION OF EQUIPMENT

3.13.1 Selection of equipment is a time-consuming process which must be undertaken with each department involved in the development. It will involve going through the equipment list for those items to be bought as new and studying catalogues from recommended suppliers. In some cases, it will be necessary to request samples on loan from suppliers so that user departments can test them in a working situation to see if they meet the needs of the patients and the staff. For example, patient chairs in an elderly ward will need to be of a different specification from those required in an adult acute ward, as the mobility of the patients is likely to be different.

3.13.2 The other factor to consider is the interior design of the particular facility. The architect or a specialist interior designer will, in agreement with the user groups at the design stage, have agreed colour schemes for each area. This process may have included general guidelines for the selection of chair colours to complement the colour scheme, and the type of wood which should be selected for desks, tables and chairs. This should ensure that there is an overall design concept for each department that highlights the differences between departments and allow each one to have its own atmosphere.

3.13.3 The date for final selection of loose equipment and furniture will be a key date in the commissioning masterplan: given the types of equipment to be procured, the capital equipment manager should be able to give a reasonable estimate of delivery times from the date of the order. By working back from when the equipment is required in a particular room, a date by which orders must be placed can be specified. Bearing in mind that this process can often take time, particularly if EC rules apply, the capital equipment manager can then set a date in the masterplan by which working groups must agree the amount and specification of furniture and equipment to be ordered.

3.13.4 Group 2 equipment, although not usually a large category, should also be given careful consideration so that it can be delivered to fit in with the contractor's programme for fixing these items. The commissioning manager should seek the advice of the project manager, who will be aware of the contractor's overall programme for when Group 2 items should be delivered. Once again, time should be allowed for ordering and delivery periods and key dates for the agreement of the amount of Group 2 items should be built into the commissioning masterplan.

DELIVERY OF EQUIPMENT

3.14.1 The amount of furniture and equipment to be delivered can often be quite large and it is therefore often sensible to have deliveries made in stages, especially if different parts of the facility are brought into full use over a period of time. This should reduce the amount of space required to store equipment.

STORAGE OF FURNITURE AND EQUIPMENT

3.15.1 The main criterion is that the area selected for the storage of furniture and equipment should be secure and clean, that the risk of water or other damage is low, and that it is reasonably accessible to the new facility and for deliveries.

3.15.2 There may sometimes be spare space which the provider can use to house furniture and equipment. There are various options.

- Local warehousing, although it will inevitably be a cost against the project, is sensible if there is no spare space available close to the new facility. This option should be assessed at the Full Business Case stage and appropriate allowances made in the overall project cost.
- Early handover of a part of the new facility could be built into the contract in order to make storage facilities available within the development. This option is not always possible.
- The last area or department to be commissioned could be used for storage.

PLACING OF EQUIPMENT

3.16.1 When deliveries are made, the commissioning manager should ensure that all items are labelled with the room number and the location within that room. It is often sensible to undertake this task as quickly as possible after delivery in order to break this crucial activity up into manageable stages. When the time comes for the equipment to be put in place, it can be quickly and easily moved to its new location.

3.16.2 Some items will need to be put in position and then tested to ensure that they are working properly – for example, fridges, which must operate within a certain temperature range. These items may need to be monitored in their new location, so that mechanical and electrical services can be balanced by the contractor, and their operation monitored by the users.

3.16.3 For all items of transferred equipment, the space and facilities required will need careful checking, including assessment of electrical requirements, wall fixings, plumbing or under-bench fittings. The compatibility of equipment with basic services such as piped gases will also need to be assessed.

EQUIPPING A ROOM

3.17.1 Each room in a new facility will have an equipment list associated with it. This will show those items for transfer and those to be bought new. The room should be given a number, which will normally accord with that shown on the architect's drawings. These drawings should also locate individual items of furniture and equipment at 1:50 scale. It is sensible to allocate each item a letter or number and show this on the plan. A copy of the plan and the list can be attached to the door of the room.

3.17.2 Each room should be numbered by the contractor as part of the contract. The number is usually indicated by a small disc placed on or above the door.

3.17.3 New items of furniture and equipment should be labelled with the number of the room into which they are to be placed, and given the letter or number corresponding to the location in the room which they will occupy. Items for transfer can then be dealt with in the same way. This should ensure that when the time comes to transfer into the new facility, there is no confusion as to the room and location that the piece of furniture or equipment will occupy.

EQUIPPING CONTINGENCY

3.18.1 It is almost inevitable, despite the care and attention that will have been taken in the selection and ordering process, that some items will be overlooked and may need to be ordered urgently. The commissioning manager should retain therefore an equipment contingency sum for this eventuality, which should be fixed in agreement with the project director.

Site Visits

3.19.1 Visits to the contractor's site must be carefully controlled throughout the duration of the contract. Users should not enter the site without the explicit agreement of the project manager and the contractor: the site is technically and contractually in the ownership of the contractor, who therefore has the right to decide who is allowed on it.

3.19.2 Site visits should be possible as the facility comes closer to completion. Visits should be planned and agreed with the contractor well in advance. Requests for visits should normally be channelled through the project director and thence through the project manager.

3.19.3 Upon handover, the contractor should observe the same procedure for any workers on the site, or for site visits which the contractor may wish to make. It is easy to underestimate the number of people who will wish to visit the facility during the commissioning period.

Technical Commissioning

3.20.1 Technical commissioning is the bringing into use of the mechanical and electrical services in the building and the equipment which has been put in place, a process that should be overseen by the project director as part of the construction project (see *Management of Construction Projects*).

3.20.2 Commissioning is undertaken by the contractor and the relevant sub-contractors. It will be the task of the design team in this situation to ensure that all services and equipment provided under the contract are operating according to the contract specification, which in turn should be consistent with the user requirements.

3.20.3 It will be the responsibility of the project manager to see that the contractor draws up a full programme of technical demonstrations as part of this process. Dates and times of the demonstrations should be passed to the commissioning manager, who will arrange for the relevant personnel from the user of the facility to be in attendance, so that they can understand how the equipment operates.

3.20.4 Similarly, ventilation systems, alarm systems and plant must be demonstrated with those responsible for its maintenance in attendance.

3.20.5 It will be the responsibility of the contractor, under the terms of the contract, to ensure that all technical manuals and literature relating to the operation and maintenance of equipment and plant are passed to the provider unit. The project manager must ensure that this is done.

Artworks/Interior Design

3.21.1 In the section dealing with equipping there is mention of the need to ensure that the selection of furniture is consistent with the interior design of the facility. There may also be artworks or artforms to be installed in the facility.
The following principles should be applied.

- A detailed programme should be agreed with the artist(s) to ensure that completion of fixed works, such as tilework or murals, can be built into the contractor's programme.

- The location of large, heavy art installations should be identified at the design stage, so that the specification of the building can allow for selected walls to be strengthened.

- Design standards should be agreed at the outset, preferably during the briefing and specification of the project. This is particularly important for floor coverings, colours to be used in accordance with a corporate identity, curtain fabric, wood colour, door furniture, sanitary ware, etc.

- Curtain fabric must be readily available to allow time for making up and fitting.

Signage

3.22.1 The method and strategy for signage, both internally and externally, is important for patients and visitors to the hospital. One of the most common complaints from the public in hospitals is that they cannot find their way round. Signage should be clear and not obscured. Directions should be unambiguous. Too much information should not be given at once: large banks of signs are difficult to understand. Directional information must be structured so that the patient or visitor is led through a facility carefully and logically. The use of maps should be encouraged with 'milestones' along a route which can be easily interpreted. The principle should follow that of navigating in a town centre.

3.22.2 In general:

- agree the name of the new facility at the earliest opportunity;
- agree the style, colour and configuration of signs at the briefing stage if possible;
- provide signs suitable for those ethnic minorities for whom English is not the first language;
- provide signs which can be interpreted by people with visual perception difficulties and blind people;
- agree the internal sign schedule only after wide consultation with different departments, for example, X-ray or radiology;

- minimise the number of signs used – it is easy to add signs if required once the building is operational;
- agree room titles with each department in the facility, titles such as 'Store' or 'Cleaning Utility' should be used throughout the facility;
- if need be, re-sign part or all of the complex of which the new facility is a part;
- invite representatives of the patient consultation group(s) to walk around the new facility and the existing building, as this might inform the strategy;
- have a member of the commissioning manager's staff supervise the fitting and positioning of the signs as this can help to avoid any misinterpretation of the agreed sign schedule;
- obtain planning permission for external signage from the Local Authority – sufficient time for making the application and subsequent discussions with Council Planners must be allowed;
- ensure that policies for car parking, access, delivery points and disabled access facilities are decided in time for the relevant signs to be ordered;
- arrange for temporary signage to be installed in plenty of time in a facility which might be closing as a result of the development so that the public are well-informed;
- ensure that road signs outside to the hospital site are agreed and installed by the Highways Department of the Local Authority;
- ensure that white and yellow lining is included in plans for areas outside the facility, as well as handrails and resting points for those with mobility difficulties;
- ensure that dropping-off points and ambulance parking bays are clearly identified.

'Snagging' the Facility

3.23.1 Upon completion of the contract, the project manager working with the design team and the Clerks of Works, will recommend that the facility be handed over to the client. It is usual for a list of fairly minor items to be outstanding at this stage. This is known as the 'snagging list'.

3.23.2 Snagging will be undertaken by the contractor(s) after the formal handover of the building. It is important to note that the building has now passed out of the ownership of the contractor into that of the provider. The contractor and the client must therefore agree rules governing security and access to the facility while snagging is being undertaken. Snagging will usually consist of touching up paintwork, fitting the odd piece of door furniture, and so forth.

3.23.3 During this period, it can be useful for the commissioning manager to be aware of the areas in which the contractor is still undertaking these minor works, so that care can be taken when in these areas.

The Post-handover Period

3.24.1 The main task after building handover by the contractor is obviously to move services into the new facility. The first consideration after handover must be to ensure that the building is secure as it may be some time before users actually occupy the building. Depending on the size of the scheme, procedures must be established to ensure that:

- the facility is locked up out of hours or when it is known that no one will need to be inside it;
- there is a security presence, whether in-house or contract, in the facility, if appropriate;
- regular checks are made to detect any leaks or other problems that might delay bringing the facility into use;
- there is a 'signing in' book, so that access can be controlled and it is always known how many people are in the facility at any time.

3.24.2 After the contractor has finished completely, or finished the majority of snagging works, all vinyl floors should be cleaned and sealed, which will minimise wear and tear as services are transfered into the facility and make them easier to clean when the facility is fully operational. Contractors will undertake some cleaning, but will not usually seal floors. Several days should be allowed for this activity, depending upon the size of the facility. It is useful to have agreed the time to be taken for this and it should be built into the commissioning masterplan.

3.24.3 If heavy equipment is to be brought into the facility, the floor coverings should be protected to prevent damage.

3.24.4 The commissioning team should assess any post-contract works required by the users. These should be matched against the original brief and action taken if it is decided that the contract has not met the brief.

3.24.5 Requests for works which fall outside the original brief as agreed by the project owner should be dealt with as part of normal maintenance or minor capital works through local Trust procedures. These works should not be deemed part of the contract or of commissioning costs, unless it is decided that not to undertake the works would prejudice the effectiveness of patient care. The final adjudication on this should rest with the project owner.

3.24.6 It is possible that some items or parts of the specification have been omitted by the contractor in error. These should be identified by the project manager and dealt with by the contractor. The commissioning manager must be made aware of the extent of the works, as there could be an impact on the commissioning masterplan.

Decommissioning Redundant Facilities

3.25.1 Decommissioning is the process by which a redundant site or facility is taken out of operational use following the transfer into the new facility.

3.25.2 A policy for the disposal of surplus equipment must be agreed, in order that equipment can be redistributed elsewhere in the Trust if necessary, or sold or scrapped.

3.25.3 It is useful to identify a central storage facility for surplus assets where equipment can be transferred after the transfer and closure of each department. An inventory should be kept so that the assets can be removed from the Trust's asset register when necessary.

3.25.4 If services are to be transfered from old buildings or another site on a phased basis, ongoing maintenance and security will be necessary during this period.

3.25.5 Temporary signs should be provided indicating departments which have closed and been transferred. The local police force should be informed of closures in advance of the event.

3.25.6 Measures should be taken to make safe any plant or equipment not to be removed. Lifts and other plant should be deactivated and sealed off. Any large built-in refrigerators will need to have their doors removed.

Closed Facilities

3.26.1 Once the facility has been closed, all redundant facilities must be secured, security arranged and arrangements made for disposal.

3.26.2 Given the potential for fluctuation in land values over the life of even a relatively small scheme, contingency plans should be prepared if a site cannot be disposed of shortly after it has been vacated.

3.26.3 This risk should be assessed as part of the full business case and relevant allowances made for the security of the site and any other associated costs as part of the project contingency sum.

Public Relations

3.27.1 Public relations must be a high priority on the commissioning manager's agenda.

3.27.2 It is essential that some training is given to staff involved in commissioning the new facility. Media interest in NHS capital schemes is extremely keen, especially if a sensitive rationalisation programme is involved.

3.27.3 It will be in everybody's interests to ensure that a provider PR service is involved in drawing up the PR strategy and advising on the best way of generating publicity through the media to ensure maximum coverage, and therefore communication to the public of progress on the scheme and the programme for opening services in the new facility.

3.27.4 It is important to capitalise on the interesting features of the new facility, such as the establishment of a new service, the original design of the facility or the art installations.

3.27.5 Often, it is possible to undertake several 'media events'. These could include:

- comments from the Chief Executive or Chairman, when approval is given, including the background to the scheme and the proposed date for its completion;
- a photo-opportunity of the Chairman of the provider and the contractor as they sign the contract;
- start on site of the scheme;
- key milestones during the life of the scheme: completing the foundations, laying the first brick, laying the last brick or completing the external structure (or 'topping out');
- completion and handover of the scheme to the client;
- the first out-patient day;
- the first in-patient day;
- the first patient to use a 'high-tech' piece of equipment, for example the first CT or MRI scan etc;
- the official opening.

3.27.6 By ensuring steady coverage of the scheme, there is an opportunity to inform the general public of what is going on and keep them in touch with developments throughout the life of the scheme. As they will be the ultimate users of the scheme, this is only proper.

3.27.7 There should be other opportunities to make contact with the public apart from media coverage; which could include:

- 'open days' for the new facility;
- leaflets in GPs' surgeries or distributed generally to the local community explaining the development process and programme;
- 'roadshows' or exhibitions in local shopping centres: these would involve staff associated with the scheme taking a stall, with information literature and photographs, out to town centres, etc;
- presentations to local statutory and voluntary groups;
- targeting groups with information relevant to them: for example, GPs will need to know details of referral arrangements and service standards, whereas members of the public need to know where and when the department they attend is moving, arrangements for car parking etc. Separate leaflets may be appropriate. Different articles suitable for different sorts of journals and publications should be prepared.

3.27.8 All members of staff who will have contact with the media or who will be undertaking presentations should have some training in how to answer questions and put across the key messages. The PR department will usually be able to assist with this.

Handover to Operational Management

3.28.1 There will be a need to maintain the commissioning team for at least three months after the facility has been brought into use. The team and the commissioning manager should be available to deal with issues which arise from occupation and use of the new facility.

3.28.2 the operational management must work alongside the commissioning team to ensure that day-to-day queries or problems of an operational nature can begin to be dealt with by managers of the service in the normal way.

Official Opening

3.29.1 The official opening of the facility should be undertaken about three to six months after full occupation has been achieved. This provides an opportunity for staff to become used to their new working environment and any residual post-contract issues to be dealt with.

3.29.2 The arrangements for the opening should be the responsibility of the commissioning manager.

3.29.3 Trusts should produce their own local guidelines for dealing with official openings. The person who should undertake the opening usually depends on the size of the facility and its general status in the local community. Once again, the PR department will be able to advise.

3.29.4 The official opening should be one of the key dates on the masterplan and should be publicised and arranged well in advance to provide maximum impact.

3.29.5 For smaller schemes, it might be appropriate for the chairperson of the provider, or a local dignitary, MP, MEP or Councillor, to open the facility officially. An alternative is a media celebrity with local links.

3.29.6 For very large schemes, it might be appropriate to approach a senior member of the Government or a member of the Royal Family to undertake the duty. For this it is crucial to understand that many months' notice is required to arrange an aggreement with such people. Informal contact should be made with the private office of the first choice to enquire whether the person would be willing to open the facility and which dates might be suitable. If an informal, positive reply is given, the chairperson of the provider should write to the private office officially making the invitation. It is always wise to have a list of second and third choices on standby if the first choice is unavailable or unwilling to attend. Protocol relating to Royal or Government visits should be checked carefully with the appropriate private office.

3.29.7 The list of invitees should be carefully selected to ensure that it represents a good cross-section of the staff and team involved in the design, commissioning and construction of the facility.

Index

References are to paragraphs

Alarm systems
  demonstration of 3.20.4
Artworks 3.21.1

Closed facilities
  contingency plans for 3.26.2
  disposal of 3.26.1
  security and other costs of 3.26.3
Commissioning manager
  administrative and secretarial support 1.2.4
  commissioning masterplan, drawing up 2.1.1
  commissioning team operating under direction of 1.4.1
  contractor, links with 1.9
  duties of 1.3.1
  letting of contract, establishment at time of 2.2.4
  official opening, arrangements for 3.29.2
  person being 1.2.1
  project director, working to 1.2.2
  recruitment 1.2.3
  reports by 1.8.2, 1.8.3
  responsibility, line of 1.3.2
  senior manager, as 1.2.3
  update meetings 1.8.4
Commissioning masterplan
  chart 2.1.2
  drawing up 2.1.1
  risk assessment 2.4.1
Commissioning process
  integration 3.6
  organisation of 1.1.1
Commissioning team
  agreed brief, interpretation of 2.2.5
  commissioning manager, operation under direction of 1.4.1
  construction project team, links with 1.8
  finance function, representative of 3.4.5
  handover, maintenance after 3.28
  letting of contract, establishment at time of 2.2.4
  members 1.4.2
  organisational links 1.7.1
  role of 1.5.1
  working groups 1.6
Contract procurement strategy
  design and build 2.2.2–2.2.6
  outline brief 2.2.3
  performance specification 2.2.3
  selection of 2.2.1
Contractor
  commissioning team, links with 1.9
  omissions from specification 3.24.6
  snagging by 3.23.2, 3.23.3
  technical commissioning by 3.20.2

Decanting
  meaning 3.10.1
  taking account of 3.10.2
Design and build strategy 2.2.2–2.2.6
Double running costs
  income and expenditure projections, taking account of 3.4.4
  meaning 3.2.9
  minimising 3.2.10

Enabling schemes 2.3.1
Equipment
  budget 3.12.1
  delivery of 3.14.1
  fixed items 3.12.8, 3.12.9
  groups, alteration of 3.12.5
  health care provider, purchased by 3.13.4
  initial listing 3.12.2
  interior design, consideration of 3.13.2
  new 3.12.6
  placing 3.16
  portable 3.12.7
  replacement 3.12.6
  room data sheets 3.12.3
  room number, labelling with 3.17.3
  samples 3.13.1
  schedules 3.12.3
  selection 3.13
  storage 3.15
  surplus, disposal of 3.25.2, 3.25.3
  testing 3.16.2
  transferred, checking space and facilities for 3.16.3
  types of 3.12.4
Equipping
  capital equipping manager 3.12.7
  contingency 3.18
  full business case strategy, reinforcement of 3.11.2
  rooms 3.17
  strategy for 3.11
Exhibition
  scheme progress, showing 3.3.5, 3.3.6

Full Business Case
  assumptions, variances from 3.4.3
  functional contents, changes to 3.5.3
  review of 3.5
Furniture
  room number, labelling with 3.17.3
  storage 3.15

Interior design 3.21.1

New facility
  different buildings, handing over of 3.9.2
  floor coverings, protection of 3.24.3
  floors, cleaning and sealing 3.24.2
  key milestones, publicising 3.7.2
  official opening 3.29
  omissions from specification 3.24.6
  patient representative groups, consultation with 3.7.3
  phased occupation of 3.9
  post-contract works, assessment of 3.24.4
  services, moving 3.24.1
  single, handing over in sections 3.9.3
  visits to 3.3.8, 3.8.3
  works outside original brief 3.24.5

Official opening
arranging 3.29.2
guidelines for 3.29.3
invitees, list of 3.29.7
key date, as 3.29.4
large schemes, for 3.29.6
small schemes, for 3.29.5
time for 3.29.1
Operational management, handover to
commissioning team, keeping in place 3.28
Operational policies
agreement and adoption of 3.1.2
design process, informing 3.1.2
operational procedures and principles drawn from 3.1.1
Operational procedures
commissioning process, drawn up during 3.1.3
decanting, taking account of 3.10.2
documents, format for 3.1.8
evaluation of facility, basis for 3.1.7
function, details of 3.1.4
information in 3.1.3
overall policies, relation to 3.1.5
phased occupation, taking account of 3.9.4
policies, drawn from 3.1.1
staff training, mechanism for 3.1.6
summary sheet 3.1.9

Plant
demonstration of 3.20.4
Project director
commissioning manager working to 1.2.2
commissioning team, member of 1.4.2
integration of work, responsibility for 3.6.2
operational management, working with 3.6.3
update meetings 1.8.4
Project manager
commissioning team, member of 1.4.2
Project team
commissioning team, links with 1.8
Public relations
contact with public 3.27.7
developments, keeping public in touch with 3.27.6
interesting features, capitalising on 3.27.4
media events 3.27.5
priority of 3.27.1
strategy, drawing up 3.27.3
training 3.27.2, 3.27.8
Purchasers
keeping informed 3.8.2
new facility, visits to 3.8.3
support from 3.8.1

Redundant facilities, decommissioning
making safe 3.25.6
meaning 3.25.1
policy for 3.25.2
services, transfer of 3.25.4
temporary signs 3.25.5
Revenue budgets
baselines, production of 3.4.1
double running costs, taking account of 3.4.4
finance function, representative of 3.4.5
full business case assumptions, variances from 3.4.3
managers of 3.4.2
Risk assessment 2.4
Risk management strategy 2.4.2

Services
moving 3.24.1
new facility, transfer to 3.2.8
phased transfer of 3.25.4
Signage
method and strategy for 3.22.1
requirements 3.22.2
Site visits
control of 3.19.1
handover, on 3.19.3
planning 3.19.2
Snagging
contractor, by 3.23.2, 3.23.3
list, meaning 3.23.1
Staff
groups, meeting 3.3.4
keeping informed 3.3
morale, monitoring 3.3.7
new facility, visits to 3.3.8, 3.8.3
new, key dates for 3.2.12
public relations training 3.27.2, 3.27.8
recruitment, strategies for 3.2.11
short-term employment, provision for 3.2.9
training, mechanism for 3.1.6
updating, means of 3.3.5
Staffing levels
changes in 3.2.2
decisions on 3.2.7
guidance on 3.2.6
points to be considered 3.2.4
review of 3.2.1
schedule, production of 3.2.5
working practices, review of 3.2.3

Technical commissioning
contractor and sub-contractors, by 3.20.2
demonstrations, programme of 3.20.3, 3.20.4
manuals and literature 3.20.5
meaning 3.20.1
Transfer of facilities
key dates 3.7.1
key milestones, publicising 3.7.2
programme, co-ordination of 3.7.4

Ventilation systems
demonstration of 3.20.4

Working groups
documentation 1.6.7
finance 3.4.6
members, liaison by 1.6.4
membership 1.6.3
organisational links 1.7.1
other colleagues, liaison with 1.6.4, 1.6.5
plans, formal acceptance of 1.6.6
reports by 1.6.2
role of 1.6.1

Printed in the United Kingdom for HMSO.
Dd.297818, C14, 5/94, 3400, 5673, 287956.

HMSO publications are available from:

HMSO Publications Centre
(Mail, fax and telephone orders only)
PO Box 276, London SW8 5DT
Telephone orders 071-873 9090
General enquiries 071-873 0011
(queuing system in operation for both numbers)
Fax orders 071-873 8200

HMSO Bookshops
49 High Holborn, London WC1V 6HB
(counter service only)
071-873 0011 Fax 071-873 8200
258 Broad Street, Birmingham B1 2HE
021-643 3740 Fax 021-643 6510
33 Wine Street, Bristol BS1 2BQ
0272 264306 Fax 0272 294515
9-21 Princess Street, Manchester M60 8AS
061-834 7201 Fax 061-833 0634
16 Arthur Street, Belfast BT1 4GD
0232 238451 Fax 0232 235401
71 Lothian Road, Edinburgh EH3 9AZ
031-228 4181 Fax 031-229 2734

HMSO's Accredited Agents
(see Yellow Pages)

and through good booksellers

£4.50 net

ISBN 0-11-321724-2

9 780113 217243